Taking into account the amendment to the specification submitted on Feb. 1, 2001, which attempts to clarify the terminology, the Examiner is directed to page 9, lines 14-18 of the amended specification, "*Although the use of different engraving tools already provides a wealth of possibilities for bringing into the embossing plate substructures in the form of defined roughness structures at the base of the engraving or additional information, which can be called micro-engraving in the present case, the inventive method can of course also be used to modify the flanks of the engraving along the desired contours.*" Thus, the substructure refers to the engraved base of the flanks, the engraving represented by reference numeral 29 in Fig. 10, and not the micro-structure lines 30 which are within the flanks 28 of the plate 15. In essence, "substructure" refers to the roughness structure, *i.e.*, the rough surface on the bottom of a recess left as the result of the engraving process, as shown in Figs. 6b and 6c. Fig. 5b depicts a tract that the tool traverses to remove residual area 15 left after the contour 9 is engraved, to provide a substructure that is meander-shaped. Similarly, Fig. 5c depicts a contour-parallel track.

In light of the explanation above, the Applicant respectfully requests reconsideration of the rejection of claims 24, 25 and 28-35 on the grounds that Jacquerod and Cauwet fail to disclose or suggest a printing plate with an engraved substructure characterized in that the substructure is meander-shaped or extends at least in partial areas parallel to a direction of at least one line.

Instead, Jacquerod grains the bottom of the intaglio lettering by an etching process to form a stippled effect design. The substructures of Jacquerod are random patterns of dimples in a stippled pattern 11a as seen in Figs. 1 and 3. In fact, Jacquerod teaches against mechanically placing a pattern onto the substructure using a machine by explaining that, ". . .*such mechanical treating of the plate is very expensive. It requires the labor of a skilled engraver who is required to put in many hours of work to cross hatch even a small area. . .*" (page 1, column 1, lines 20-24).

The Cauwet patent does not include any specific teachings concerning engraving, meandering or partially straight substructures in a linearly engraved depression, and therefore could not have motivated the ordinary artisan to modify the teachings of Jacquerod to include such structures.

Since neither of the references discloses or reasonably suggests, when considered as a whole in the manner that the ordinary artisan would have considered them, and since the primary reference in fact teaches away from engraving, withdrawal of the rejection under 35 U.S.C. § 102(b)/103(a) is respectfully requested.

Reconsideration of the 35 U.S.C. §103(a) rejection of claims 1-18, 20-22 and 36 based on the Shima patent, and on the Shima patent in various combinations with the Cauwet and Jacquerod patents, is also respectfully requested on the grounds that Shima does not produce at least one depression to define a desired contour before removing the partial area, as recited in claim 1.

Instead, Shima teaches displaying a profile outline or contour on a display screen of a computer. The cursor is successively positioned and its coordinates are inputted at selected points on the display screen. The tool path is calculated by a computer program with starting and ending points as seen in Fig. 16, reference numeral 4. The outline 1 shown in Fig. 16 is the contour displayed on a screen of a computer and is inputted by the user (Col. 2, lines 45-48), and is not defined or removed by the cutting tool. Thus, Shima teaches "hollowing out" an area on an object after the profile or contour is defined on a computer screen to improve cutting efficiency and to reduce cutting time. In contrast, the present invention defines an edge of a desired contour on the plate in the form of a line in order to produce plates for printing high-quality papers such as bank notes.

Because Shima does not teach or suggest the claimed step of producing at least one line depression which defines a limited partial area in a surface of a plate, the edge of the

partial area defining a desired contour, and because neither Cauwet nor Jacquerod include any teachings that would have motivated the ordinary artisan to modify Shima, is respectfully submitted that the rejection of the claims under Shima, Cauwet and Jacquerod under 35 U.S.C. §103a is improper and should be withdrawn.

Thus, having overcome each of the rejections made in the last Office Action, withdrawal of the objections and rejections, an expedited passage of the application to issue is requested.

Respectfully submitted,
BACON & THOMAS, PLLC

Date: August 13, 2001 By: BENJAMIN E. URCIA
Registration No. 33,805

BACON & THOMAS, PLLC
625 Slaters Lane, 4th Floor
Alexandria, Virginia 22314

Telephone: (703) 683-0500

NWB:S:\Producer\cko\Pending I...P\K\Kaule 147398\a03.wpd